Amendments to the Claims

This listing of claims will replace all prior wersions, and listings, of claims in the application.

Listing of Claims

1. (currently amended) A dermatological formulation comprising a physiologically acceptable carrier and an effective amount of one or more plant extracts having extracellular protease inhibiting activity, said plant extract derived from any one of the plants listed in Tables 1, 2, 3, 4 and 5 by solvent extraction, and said extracellular protease selected from the group of: matrix metalloprotease-1 (MMP-1), matrix metalloprotease-2 (MMP-2), matrix metalloprotease-3 (MMP-3), matrix metalloprotease-9 (MMP-9) and human leukocyte elastase (HLE), wherein said plant extract ~~affects~~ modulates one or more cellular activities in skin cells.

2. (original) The dermatological formulation according to claim 1, wherein said one or more cellular activities in skin cells are selected from the group of: attenuating the breakdown of collagen, fibronectin, fibrillin and/or elastin; attenuating endothelial cell migration; increasing collagen production; attenuating UV-induced extracellular protease activity and attenuating tractional forces generated by fibroblasts.

3. (currently amended) The dermatological formulation according to claim 1 ~~or 2~~, wherein said solvent is an aqueous solvent, an alcoholic solvent, or a combination thereof.

4. - 9. (Cancelled)

10. (currently amended) ~~Use of the~~ The dermatological formulation according to ~~any one of~~ claims 1, ~~2 or 3~~ wherein said dermatological formulation is for use in the routine care of the skin, hair and/or nails.

11. (currently amended) ~~Use of the~~ The dermatological formulation according to ~~any one of~~ claims 1, ~~2 or 3~~ wherein said dermatological formulation is for use to improve the health and/or appearance of the skin, hair and/or nails.

12. (currently amended) ~~Use of the~~ The dermatological formulation according to ~~any one of~~ claims 1, ~~2 or 3~~ wherein said dermatological formulation is for use in the treatment or prevention of a dermatological condition.

13. (currently amended) ~~Use of the~~ The dermatological formulation according to ~~any one of~~ claims 1, ~~2 or 3~~ wherein said dermatological formulation is for use to attenuate or prevent skin ageing.

14. - 17. (cancelled)

18. (currently amended) A process for identifying a plant extract suitable for the preparation of a dermatological formulation, said process comprising the steps of:

    (a) generating a plurality of potential extracts by solvent extraction of plant material;

    (b) analysing the ability of each of said potential plant extracts to inhibit one or more extracellular protease selected from the group of: matrix metalloprotease-1 (MMP-1), matrix metalloprotease-2 (MMP-2), matrix metalloprotease-3 (MMP-3), matrix metalloprotease-9 (MMP-9) and human leukocyte elastase (HLE);

    (c) selecting those potential extracts that are capable of inhibiting the activity of at least one of said extracellular proteases to provide a group of extracts;

    (d) analysing each extract in said group of extracts for the ability to ~~affect~~ modulate one or more cellular activities in skin cells selected from the

group of: attenuating the breakdown of collagen, fibronectin, fibrillin and/or elastin; attenuating endothelial cell migration; increasing collagen production; attenuating UV-induced extracellular protease activity and attenuating tractional forces generated by fibroblasts; and

(e) selecting an extract that is capable of ~~affecting~~ modulating one or more of said cellular activities to provide a plant extract suitable for the preparation of a dermatological formulation.

19. (original) The process according to claim 18, wherein said plurality of potential extracts is generated from plant material from a single plant source.

20. (original) The process according to claim 18, wherein said plurality of potential extracts is generated by selecting a group of plants; harvesting plant material from each plant in said selected group of plants; and subjecting said plant material from each plant to a solvent extraction process to provide said plurality of potential extracts.

21. (currently amended) The process according to ~~any one of~~ claims 18, ~~19 or 20,~~ wherein said solvent extraction process employs an alcohol, water, an aqueous buffer, or a combination thereof as solvent.

22. (currently amended) The process according to ~~any one of~~ claims 18, ~~19, 20 or 21,~~ wherein the group of extracts selected in step (c) are capable of inhibiting the activity of at least one of said extracellular proteases by at least 20%.

23. (currently amended) The process according to ~~any one of~~ claims 18, ~~19, 20, 21 or 22,~~ further comprising the steps of subjecting each plant extract in said group of extracts to at least one cytotoxicity, bioavailability or stability test and selecting those extracts that demonstrate physiologically acceptable cytotoxicity, bioavailability and/or stability.

24. (currently amended) The process according to ~~any one of~~ claims 18, ~~19, 20, 21, 22 or 23,~~ wherein said plant material is generated from a plant or group of plants that have been subjected to one or more stress.

25. (new) The dermatological formulation according to claim 1, wherein said plant extract having extracellular protease inhibiting activity is derived by solvent extraction from a plant selected from the group of: *Aconitum napellus, Acorus calamus, Alchemilla mollis, Allium cepa, Allium sativum, Allium tuberosum, Ambrosia artemisiifolia, Anethum graveolens, Anthemis tinctoria, Aronia melanocarpa (Michx.) Ell., Arctostaphylos uva-ursi, Aronia x prunifolia, Artemisia dracunculus, Avena sativa, Beta vulgaris, Beta vulgaris L. subsp. Vulgaris, Borago officinalis, Brassica napus, Brassica oleracea, Brassica oleracea L. var. italica Plenck, Brassica rapa, Bromus inermis, Capsicum annuum L. var. annuum, Cerastium tomentosum, Chaerophyllum bulbosum, Chenopodium quinoa, Chenopodium quinoa subsp. Quinoa, Chenopodium quinoa Willd., Chichorium endivia, Chichorium endivia subsp. Endivia, Circium arvense, Citrullus lanatus, Cornus canadensis, Cornus sericea, Cynara cardunculus subsp. Cardunculus, Daucus carota, Daucus carota subsp carota L., Dolichos lablab, Euphorbia amygdaloides, Fagopyrum tataricum, Foeniculum vulgare, Frangula alnus, Galinsoga quadriradiata, Gentiana lutea, Geranium sanguineum, Geranium x cantabrigiense, Glycyrrhiza glabra, Hamamelis virginiana, Helianthus strumosus, Heliotropium arborescens, Hordeum vulgare subsp. Vulgare, Hypomyces lactifluorum, Juniperus communis L., Lentinus edodes, Lotus corniculatus, Manihot esculenta, Matricaria recutita, Melilotus albus, Melilotus alba Medik., Melissa officinalis, Mentha x piperita, Oenothera biennis, Pastinaca sativa L., Petroselinum crispum, Phaseolus vulgaris, Physalis philadelphica, Phytolacca decandra, Phytolacca decandra syn. P. americana, Pimpinella anisum, Pisum sativum, Potentilla anserina L., Potentilla fruticosa, Poterium sanguisorba, Pyrus communis, Raphanus raphanistrum, Rheum x hybridum, Rhus typhina L., Ribes nigrum L., Ribes sylvestre, Rodgersia spp., Rosmarinus officinalis, Rubus occidentalis, Rubus*

thibetanus, Rumex crispus, Rumex scutatus, Ruta graveolens, Salvia officinalis, Sambucus canadensis L., Setaria italica, Solanum melongena L., Sorghum dochna bicolor gr technicum, Stellaria media, Tanacetum cinerariifolium, Taraxacum officinale, Teucrium chamaedrys, Thymus fragantissimus, Thymus x citriodorus, Trifolium incarnatum, Triticosecale spp., Tropaeolum majus L., Tsuga canadensis, Tsuga diversifolia, Vaccinium angustifolium, Vaccinium angustifolium Ait., Vitia sp., x Triticosecale spp., Zea mays L. and *Zingiber officinale.*

26. (new) The dermatological formulation according to claim 1, wherein said plant extract having extracellular protease inhibiting activity is derived by solvent extraction from a plant selected from the group of: *Beta vulgaris L., Brassica oleracea L., Capsicum annuum L, Chenopodium quinoa, Daucus carota L., Geranium x cantabrigiense, Juniperus communis L., Melilotus alba, Pastinaca sativa L., Potentilla anserina L., Rhus typhina L., Solanum melongena L., Tropaeolum majus L., Vaccinium angustifolium, x Triticosecale spp.* and *Zea mays L.*

27. (new) The dermatological formulation according to claim 3, wherein said alcoholic solvent is ethanol or a glycol.

28. (new) The dermatological formulation according to claim 1, wherein said plant is subjected to one or more stress prior to said solvent extraction.

29. (new) A method of preparing a dermatological formulation comprising admixing an effective amount of one or more plant extracts having extracellular protease inhibiting activity with a physiologically acceptable carrier, said plant extract derived from any one of the plants listed in Tables 1, 2, 3, 4 and 5 by solvent extraction, and said extracellular protease selected from the group of: matrix metalloprotease-1 (MMP-1), matrix metalloprotease-2 (MMP-2), matrix metalloprotease-3 (MMP-3), matrix metalloprotease-9 (MMP-9) and human leukocyte elastase (HLE), wherein said plant extract modulates one or more cellular activities in skin cells.